

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027152**Date Inspected:** 07-Feb-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Steve Jensen**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS OBG**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 8W PP61.5 W2 deck access hole infill plate to top deck plate outside, QA randomly observed ABF/JV qualified welder Wai Kitlai continuing to perform CJP groove welding fill pass then cover pass on the straight portion of the butt joint. The welder was observed perform automatic welding in the 1G (flat) position utilizing a Bug-o track mounted dual shield Flux Cored Arc Welding (FCAW-G) with E71T-1M, 1/16" diameter wire electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3030-1. The joint being welded had a single V-groove butt joint that has been root welded without backing bar. The splice joint was preheated to greater than 150 degrees Fahrenheit using propane gas torch prior welding. During welding, ABF Quality Control (QC) Steve Jensen was noted monitoring the welding parameters of the welder. Measured welding parameters were 254 amperes, 23.5 volts and travel speed of 340mm per minute with calculated heat input of 1.05Kjoules per mm. During the shift, cover pass welding on straight portion of the butt joint was completed and the welder has moved to the other deck access hole 8W PP70.5 W2 and performed FCAW welding fill pass on west side radius portion of the butt joint. At the end of the shift, fill pass welding was still continuing and should remain tomorrow.

At OBG 13W/14W-E side plate outside, QA randomly observed ABF personnel Rory Hogan perform plasma arc gouging on the backing bar removal of the splice butt joint. The personnel were using an Esab plasma arc gouging machine that has the nozzle holder attached to a Bug-o track. Gouging of the backing bar was not completed today

WELDING INSPECTION REPORT

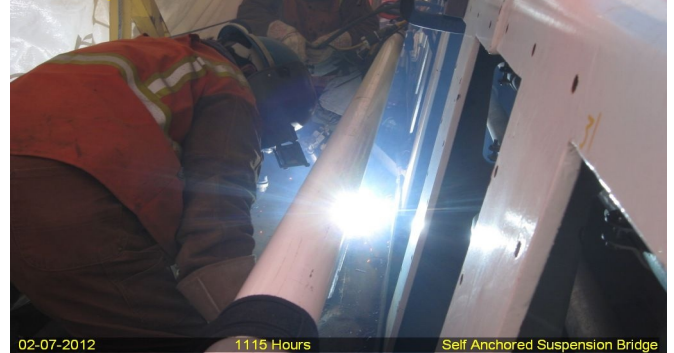
(Continued Page 2 of 2)

and should continue tomorrow.

At OBG 13W/14W-E side plate outside, ABF welder Rory Hogan was noted performing back gouging on the removal of backing bar. The welder was using plasma arc gouging during the removal of the backing bar.



At OBG 8W PP61.5 W2 deck access hole infill plate to top deck plate outside, ABF welder Wai Kitlai was observed performing 1G Flux Cored Arc Welding (FCAW-G) welding fill pass to cover pass on straight portion of the butt joint.



Summary of Conversations:

No significant conversation occurred today. Due to bad weather condition at the job site, most of the welders were sent home.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer